

# US ENVIRONMENTAL PROTECTION AGENCY Region 1 New England - OEME 11 Technology Drive, North Chelmsford, MA 01863

## **Inspection Report**

Date: January 9, 2014

Subject: Allandra Farm - Concentrated Animal Feeding Operation (CAFO)

Inspection

Prepared by: Lisa Thuot – USEPA Compliance Inspector

## I. Facility Information:

Name: Allandra Farm Location: 1535 Monkton Rd.

Ferrisburgh, VT 05456

Owner/Operator: Allan Brisson, Owner

Mailing Address: (same as above)

## **II. Inspection Information:**

Date of Inspection: September 19, 2013

EPA Inspector(s): Lisa Thuot – Compliance Inspector (EPA Region 1/OEME)

Diane Boisclair – Compliance Inspector (EPA Region 1/OES)

Facility Contact(s)

During Inspection: Allan Brisson, Owner

State Contact(s): Nate Sands, Vermont Agency of Agriculture

*Weather Conditions:* Sunny, ~ 70°F

### **III. Purpose of Inspection:**

The purpose of the inspection was to assess applicability of and compliance with the CAFO requirements under the Clean Water Act at 40 C.F.R. Part 122.23.

#### Entry Procedures

Mr. Brisson was telephoned in advance of the inspection, but did not have a voicemail to leave a message. Upon arrival at the farm, EPA inspectors presented their inspector credentials to Mr. Brisson, who provided a tour of the farm. We were also introduced to Mr. Brisson's son, Michael Brisson, who did not did not accompany us during the farm tour.

## IV. Inspection Information/Findings

Allandra Farm ("the farm") is a dairy operation which Mr. Brisson purchased in 1975. The property consists of 1,800 acres owned by Mr. Brisson, with an additional 500 rented acres. The farm has approximately 1,800 cows, which includes about 880 milking cows and the remainder heifers and dry cows. There are about 14 employees working at the farm. Manure is spread to fields primarily by farm employees using farm-owned equipment. Fields are aerated before manure spreading. Mr. Brisson hires an outside contractor to inject manure into the soil on 100-150 acres of corn fields, typically in the fall after the corn harvest. He said the contractor uses a drag line and specialized equipment to inject manure to a depth of about 8 inches. The manure injection is done on fields within 2 miles of the manure pit. Mr. Brisson said his nutrient management plan (NMP) sampling data show higher levels of phosphorous in soils on manure-injected corn fields; he believes there is improved nutrient uptake using the injection method.

The manure pit holds approximately 4.6 million gallons, and has been expanded a few times (picture #1). In 2005 or 2006, the pit was certified by NRCS standards. The product "More Than Manure®" Nutrient Manager, or NTM<sup>TM</sup> is added to the manure pit as an ammonianitrogen binder; Mr. Brisson said about 7-10 gallons per month are used. According to the product website, NTM<sup>TM</sup> "protects phosphorus from lock-up and nitrogen from leaching and volatilization".

The main barn has two separate manure collection systems. Half of the barn has slatted floors with gutters where manure is scraped into hoppers. The other half of the barn has a floating dam system; some manure flows by gravity and some is pumped (if clogging occurs). Below the newest area of the barn, an 8-foot deep underground concrete pit was installed with equipment to agitate manure (picture #2). The NRCS-approved concrete pit and was added in 2005 when a barn addition was done. The used bedded pack was stored in a pile in an open yard, located west of the main barn (picture #3). Some leachate was pooling around the bedded pack pile, but was not observed flowing from the area around the pile.

There are two milking parlors at the farm. The older parlor has a 1,000 gallon tank (picture #4) which is emptied once per day by a manually-activated pump into a hopper at the main barn. Typical flow to the tank is less than 1,000 gallons per day; occasionally the tank overflows onto the surrounding grass. There was no evidence that tank overflow travels away from the vegetated area around the tank.

Silage is stored in bunkers located north of the main barn and next to the manure pit (picture #5). The corn silage bunker has concrete and plastic-lined sidewalls; no leachate was observed at this bunker (picture #6). Mr. Brisson said farm equipment is used to compact silage piles to

minimize aeration. He explained that an underdrain with pipe and stone was installed below the silage bunkers about 15 years ago to drain leachate into the manure pit.

Along the back wall of the silage bunkers, inspectors observed some leachate/standing water pooling in a low spot (picture #7). Runoff from this area flows into a drain, which was covered/not visible during our inspection. The drain discharges through a pipe into a drainage ditch, which flows through the heifer exercise/grazing lot and west toward Middlebrook Road (picture #8). Mr. Brisson took us to the road culvert on Middlebrook Road which receives runoff from the ditch and carries it into a vegetated area on the opposite side of the road (picture #9). We did not observe a direct connection from this vegetated area to a water of the U.S.

The calf barn and heifer freestall barn located on the north side of the farm. Manure from the heifer barn is scraped directly into the manure pit. The calf barn was expanded in Feb. 2013. The farm's mortality compost pile is located north of the heifer barn in a grassy field. We did not observe any leachate/runoff from the compost pile.

## V. Exit Briefing

EPA inspectors conducted an exit briefing with Allan Brisson, with Nate Sands also present. The following items were discussed:

- Ensure that overflow from the 1,000 milkhouse wastewater tank does not flow beyond the vegetated area around the tank;
- Periodically clean solids from the drain on the back side of the silage bunkers.

#### **Enclosures/Attachments:**

Inspection Pictures Aerial picture map